

From: M. Robin Church [mrmacva3@cox.net]

Sent: May 09, 2008 21:13

To: vchec

Cc: CHL5075@aol.com

Subject: VA City Hybrid Energy Center

Sir,

I am not against building a coal fired plant in SW Virginia. In fact it will do a lot for the economically depressed region. However from a Climate Change view point, it is absolutely important that we do not increase our CO2 emissions. This has been covered over and over again by many experts, such as Jim Hansen, who has already written to the Governor.

What I would like to propose is that you insist that Dominion add CCS to the plant from its initial start up. Now that may be a tall order but AEP in Mountaineer, WV, is already planning to capture 100,000 ton/yr from 30 MW(thermal), as a demonstration project. Dominion should be forced to at least provide a demonstration project from start-up, and if the Warner-Lieberman bill eventually becomes law, maybe in 2009, then Dominion will have the experience to expand to cover all their CO2 emissions. Note the AEP project was described to the Governor's Commission at W&M on April 22nd. In addition to AEP, another demonstration unit is planned for this year by 1st Energy in Burger OH using a somewhat different technology. Clearly cleaning up the CO2 is quite possible technically but of course it takes more money.

At this point it seems that Dominion are trying to get in under the wire before a Cap and Trade Bill is finally passed. If the state of Virginia is so keen to get the plant built for economic reasons in a depressed area, then perhaps it could come to some financial arrangement with Dominion to get a demonstration unit added to the plant at start up. I also tried to make this point at the Governor's Climate Change Commission at W&M during the public debate.

I have one final thought. The volume of CO2 per MW to be captured, obviously depends on the plant efficiency. Most companies are therefore investing in the highest efficiency plant they can build, which at the moment seems to be high pressure super critical units, if IGCC is ignored. This is true in the US and Europe, see RWE in Germany. It therefore seems surprising that Dominion is not going this route, but has chosen a less efficient process so that it can use cheap feed, but produce more CO2. The process they are proposing was new in the 1990's but it seems outmoded at this time when recovering CO2 will become the challenge of the future. Their process was specifically designed to reduce SO2 cheaply, which it does by converting the SO2 indirectly to CO2.

Thank you for your indulgence,

Your sincerely, M. Robin Church, PhD in Chemical Engineering, now retired to Williamsburg.